AMENDMENT TRANSMITTAL LETTER (Large Entity)  Applicant(s): Yoshinori ITO						Docket No. • • • • • • • • • • • • • • • • • • •
Serial No. Filing Date 09/912,938 O F July 25, 2001			Examiner			Group Art Unit
ABSOLUTE POSITION DETECTING DEVICE FOR A LINEAR ACTUATOR  RECEIVED						
TO THE ASSISTANT COMMISSIONER FOR PATENTS:						JAN 3 0 2002 Technology Center 2600
CLAIMS AS AMENDED						
	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST # PREV. PAID FOR		R EXTRA PRESENT	RATE	ADDITIONAL FEE
TOTAL CLAIMS	2 -	20 =		0	x \$18.	00 \$0.00
INDEP. CLAIMS	1 -	3 =		0	x \$84.	00 \$0.00
Multiple Dependent Claims (check if applicable)						
TOTAL ADDITIONAL FEE FOR THIS AMENDMENT \$0.00						
No additional fee is required for amendment.  □ Please charge Deposit Account No. in the amount of A duplicate copy of this sheet is enclosed.  □ A check in the amount of to cover the filing fee is enclosed.  □ The Commissioner is hereby authorized to charge payment of the following fees associated with this communication or credit any overpayment to Deposit Account No. 50-0591  A duplicate copy of this sheet is enclosed.  □ Any additional filing fees required under 37 C.F.R. 1.16.  □ Any patent application processing fees under 37 CFR 1.17.  □ Dated:  □ Dated:  □ Dated:						
Rosenthal & Osh 1221 McKinney, Houston, Texas 7 Telephone: (713) Facsimile: (713)	Suite 2800 77010 2228-8600			on / Q - first class ma Assistant Co 20231.	12-01 ail under 37 Commissioner	with the U.S. Postal Service as F.R. 1.8 and is addressed to the for Patents, Washington, D.C.

cc:

Rhonda L. Parker

Typed or Printed Name of Person Mailing Correspondence

PRELIMINARY AMENDMENT ATTORNEY DOCKET NO.: 04452/015001

N THE UNITED STATES PATENT AND TRADEMARK OFFICE

JAN 31 2002

**APPLICANT:** 

Yoshinori ITO

SERIAL NO: FILED:

09/912,938 July 25, 2001

TITLE:

Absolute Position Detecting Device for a Linear Actuator

U.S. Patent and Trademark Office P. O. Box 2327 Arlington, VA 22202

## **PRELIMINARY AMENDMENT**

Dear Sir:

Before examining the referenced application on the merits, please amend the application as outlined below:

## **IN THE SPECIFICATION**

Please amend the Specification as follows. A marked-up copy of the amended portions of the Specification are provided in Appendix B:

Please replace paragraph 5 located at page 4, line 39 through page 5, line 9 with the following:

 $\mathcal{A}'$ 

(Amended) With each rotation of the motor 2, the actuator output shaft 3 is moved linearly in the axial direction by an amount that is in accordance with the lead pitch of the ball-screw 41. Here, the combination of signal A and signal B will be examined. If Lp is the amount by which the output shaft 3 is moved per rotation of the motor and Sp is the detection pitch (one linear-stroke pitch) as detected by the linear absolute sensor, and  $Lp \neq Sp$ , then, if signals A and B are combined, even if the output shaft 3 moves within the space of the movement interval until aLp = bSp (where a and b are arbitrary coefficients), at no point of the movement is the combination of the signals A and B the same. Therefore, provided that the values of coefficients a and b are sufficiently large, it is possible to realize a linear absolute sensor that, based on the combination